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PATENT APPLICATION

Serial No: 08/927,022

Group Art Unit: 2171

Filed: September 10, 1997

Examining Attorney: C. Rones

For: DOCUMENT RETRIEVAL SYSTEM WITH ACCESS CONTROL

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APPLICANT'S - APPELLANT'S OPENING BRIEF

Technology Center 2100

(First Resubmission)



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant: Steven T. Kirsch PATENT APPLICATION

Serial No: 08/927,022 Group Art Unit: 2171

Filed: September 10, 1997 Examining Attorney: C. Rones

For: DOCUMENT RETRIEVAL SYSTEM WITH ACCESS CONTROL

Introduction

Applicant-Appellant filed an Appeal Brief in this matter on June 27, 2001. An Order Remanding to the Examiner dated March 28, 2002 ordered that "the application is remanded to the examiner (1) for resolutions of the issues set forth above regarding 'related appeals and interferences'; (2) for proper response to the Reply Brief, or to reopen prosecution; and (3) for such further action as may be deemed appropriate." In an Office communication dated April 23, 2002, the Examiner responded to the Reply Brief and also indicated that the application has been forwarded to the Board of Patent Appeals and Interferences. However, the Examiner failed to address resolution of issues set forth in the Order regarding related appeals and interferences.

Therefore, to resolve the issues, Applicant-Appellant has included herewith a Related Appeals and Interferences section. Applicant-Appellant respectfully submits that the First Resubmission is in compliance with 37 CFR § 1.192(c). In submitting this Appeal Brief, Applicant-Appellant withdraws the Appeal Brief filed on June 27, 2001.

Status of Claims

Claims 1-19 are pending in the application. This appeal involves claims 1-19.

Status of Amendments

An amendment after final rejection was filed on February 7, 2001. In the Advisory Action dated February 27, 2001 the Examiner indicated that the proposed amendment will be entered upon filing a Notice of Appeal and an Appeal Brief. Applicant submits herewith a copy of the pending claims.

Real Party In Interest

This application was assigned to Infoseek Corporation, with the assignment recorded in the United States Patent and Trademark Office on December 15, 1997, Reel/Frame 8877/0491. Subsequent to this assignment, the Walt Disney Company acquired Infoseek Corporation. Therefore, the Walt Disney Company is the real party in interest.

Related Appeals and Interferences

There are no related appeals and interferences at this time.

Summary of the Invention

The invention is an electronic document retrieval method and system working with a search engine in which documents are stored, not on a single computer or server, but in a distributed manner over a plurality of servers in a network, termed "web servers". Security access is the principal concern, but no access levels are contained with the documents themselves. See Applicant's specification, abstract.¹

A user enters his identification together with the query to be searched by the search engine. Applicant's specification, page 2, lines 36-38. The search engine query server receives the question and interprets the query operators to determine the number of hits responsive to the question. Applicant's specification, page 2, line 38 to page 3, line 3. Each hit is associated with an electronic document, located at a particular server by means of a pointer, known as a URL. Applicant's specification, page 3, lines 3-5.2 "However, before the hits are returned to the user, the hits are 'screened' by determining from the web server whether the user has access using an access control list associated with the web server." Applicant's Specification, page 3, line 5-9. By the use of URLs or pointers, it is possible to associate every document to which a user has access with the identification of the user. Applicant's specification, abstract. The hierarchical format of URLs, allow partial URLs to indicate levels of access. Applicant's specification, abstract. The search engine will not report the presence of the documents for which the access level of the user is insufficient. Applicant's specification, page 3,

¹This is unlike the traditional and well-known military classification system wherein a document is labeled Confidential, Secret or Top Secret.

 $^{^2}$ Note that the query results in "hits", i.e. a list of relevant documents. The documents themselves were not requested.

³URLs inherently have hierarchical format indicated by slashes. For example, uspto.gov/patents is at a higher level than uspto.gov/patents/mpep, which is higher than uspto.gov/patents/mpep/chapter 1100, etc.

lines 12-14. The web server returns only those documents for which the access level is compatible. Applicant's specification, page 3, lines 14-15. The result is that the user is prevented from discovering the URLs or documents associated with the URLs that are not compatible with the access level of the person. Applicant's specification, page 3, lines 15-17; and abstract.

<u>Issues</u>

The Examiner has stated in the Office action dated November 8, 2000 that the formal issue is that "[c]laims 1-8 & 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable by DuFresne (5,835,712)." Office action at 2.

However, in the Office action, claims 9, 10 and 19 are also rejected as being unpatentable over DuFresne as indicated at page 8 of the Office action. Therefore, Applicant respectfully submits that this rejection should apply to claims 9, 10 and 19 as well as the other claims mentioned by the Examiner.

Furthermore, the Examiner states that, "DuFresne discloses the claimed invention except for the documents each having a security level, with each document and preventing the user from discovering the existence of said document titles through the use of the search engine." The Examiner provides that Haverstock et al. supplement these missing teachings. Office action, at 3. One of these elements is in one of claims 1, 2, and 4. Claims 2-3 depend from claim 1 and claims 5-12 depend from claim 4. Therefore, Applicant respectfully submits that claims 1-12 have in actuality been rejected as obvious over DuFresne in view of Haverstock et al.

Accordingly, for the reasons stated above, Applicant has rewritten the issues as follows:

- Whether claims 1-12 are unpatentable under 35 USC §103(a) over DuFresne (U.S. Patent No.5,835,712) in view of Haverstock et al. (U.S. Patent No. 6,064,977)?
- Whether claims 13-19 are unpatentable under 35 USC §103(a) over DuFresne (U.S. Patent No. 5,835,712)?

Grouping of Claims

With respect to issue 1, claims 1, 2, 4, 7, and 8 do not stand and fall together with each other or the remaining claims. Claims 11 and 12 stand and fall together but separately from the remaining claims.

With respect to issue 2, claim 13 stands and falls separately from the other claims. Claims 15 and 16 stand and fall together but separately from the remaining claims.

Arguments

A. 35 U.S.C. § 103

Under section 103, the scope and content of the prior art are examined to determine whether, considering the differences between the prior art and the claims at issue, the invention, taken as a whole, would have been obvious to a person of ordinary skill in the art.

1. Scope and Content of the Prior Art

The following U.S. Patents are relied upon by the Examiner in the rejection of the claims under appeal.

<u>Patentee</u> <u>Patent No.</u> <u>Issue Date</u>
DuFresne 5,835,712 November 10, 1998

Haverstock et al. 6,064,977 May 16, 2000

DuFresne discloses the retrieval of a template for processing when a client makes a request for the corresponding displayable HTML page. In response to a request for a Web page from the client, the web server processes HTML tag extensions within the template corresponding to the Web page. DuFresne Col. 3, lines 10-13. The executable tag extensions, identify from a database, a field name having a value. Executing the tag replaces the tag with the corresponding value. DuFresne, Col. 3, lines 6-10. One or more databases are provided that are controlled by the processor that store the data values. DuFresne, Col. 3, lines 56-57. The template is processed by a processor using the tags and an output display page is prepared. DuFresne, Col. 9, line 35.

One aspect of the invention relates to a method of controlling user access to a requested page. Each template fetched for a requested page includes input fields for entering access control lists for specifying authorized users to read, write or execute the source in the template. DuFresne, Col. 3, line 67 to Col.4, line 1-2. After a user submits a URL to a protected document the server determines whether the URL contains an instruction to have access verified by processing the user's password and ID. DuFresne, Col. 18, lines 60-67. If not, the server retrieves the template to the requested page from the database. If there is no access control list in the access control field, everyone has access to the document and the server merges data into the template preparing the requested page for display. DuFresne Col. 19, lines 10-13. If there is an access

⁴ An "executable" tag is a mini computer program that causes a computer to do something, in this case fetching a field name from a database.

control list, and if the user is specified in the access control list then the server grants access to the record and begins processing the template to prepare an output display page.

DuFresne, Col. 19, lines 41-47.

Haverstock et al. were concerned with a system for enabling access to non-HTML objects from a web browser. Haverstock et al., abstract. The client is equipped with a standard browser. The server comprises web server functionality an HTML translator, server software and a database. Haverstock et al., Col. 2, lines 51-55. A client with a browser via HTTP, enters a URL request received by the HTTP server. Haverstock et al., Col. 2, lines 59-60. The HTTP server and the HTML translator determine the object specified by the URL, retrieve the object, translate it to HTML format and send the HTML formatted document to the client. Haverstock et al., Col. 2, lines 60-65.

In one aspect of the invention it is provided that the document may contain fields that are access controlled.

Depending on who the user is one or more of the fields may be displayed. Haverstock et al. Col. 6, lines 49-53. This may be accomplished through access control lists. Haverstock et al., Col.6, lines 64-65. Using access control lists in conjunction with standard web security, the web server can control access to HTML objects or specific fields in a page. Haverstock et al., col. 7, lines 1-13.

Haverstock et al. further provides that a user at a "no access level" "has no access to the database on the website or its associated views and HTML objects." Col. 7, lines 21-23. "This allows Web developers to easily hide sensitive information as a default function of the website." Col. 7, lines 23-25.

2. Differences Between the Prior Art and the Claims at Issue

With Applicant's claimed invention, the client enters a query into a search engine and the hits are retrieved as URLs but

are not provided to the client unless they are screened with the use of an access control list based upon the hierarchical structure of the URL. Therefore, only those documents which the client has access to are made retrievable by and known to the client.

In contrast, in both DuFresne and Haverstock et al. the user/client is already aware of the existence of the document as he inputs a URL to access the document. DuFresne, Col. 18, lines 61-63; Haverstock et al., Col. 2, lines 59-60. This is a fundamental difference between the prior art and the claimed invention.

In the cited references, if the access list provides that the user has access to that particular document then the document is retrieved for the user. If the user does not have access to the document, the document is not retrieved. However, the user is aware of the existence of the web page as he has the URL address for the Web page and the user is aware that he was denied access.

Additionally, only a single document is retrieved per client request in the cited prior art references of DuFresne and Haverstock et al. as a single URL input corresponding to a displayable page is made. In contrast, the claimed invention may yield many results per query.

Furthermore, in the prior art, no screening of hits takes place, as queries asking for all documents containing the queries are never inputted in the method of the prior art references.

Haverstock et al. state that a default function can be used to hide the fact that the client was denied access. Haverstock et al., Col. 7, lines 23-24. However, in this situation, the client is still aware of the existence of the web page as he has the URL site. A default function may cause him to make inquiries to the controller of the page regarding the specific nature of the problem with the page.

Furthermore, in the claimed invention, a single access control list that is not a part of the documents or document

index is used to check user authorization when retrieving multiple documents. In contrast, in DuFresne, a single template for a requested document contains its own access control lists. DuFresne, Col. 10, lines 9-10. Haverstock et al. do not teach or suggest where the access control lists are located or how they are assigned, therefore, Haverstock et al. fails to teach or suggest this element and fails to supplement the missing teachings. Haverstock et al., Col. 7, lines 1-14. Additionally Haverstock et al. provide that more than one access control list is used. Haverstock et al., Col. 6, lines 64-65.

Neither of the references teach nor suggest using the hierarchical structure of URLs, i.e. partial URLs, with comparison to an access control list. DuFresne does provide that partial URLs provided documents containing varying degrees of information but fail to teach or suggest using partial URLs for matching to an access control list to indicate a hierarchy of documents to which a person with a unique identification code has access. DuFresne, Col. 7, lines 10-25. Haverstock et al. provide that different clients may have access to various fields of the same document but do not teach nor suggest the use of partial URLs linked to an access control list to indicate a hierarchy of documents. Haverstock et al., Col. 7, lines 12-13.

3. The Non-Obviousness of Claims 1-12, No Suggestion to Combine the References

The Examiner concludes that it would have been obvious to one of skill in the art to modify the DuFresne reference with teachings from Haverstock et al. to produce Applicant's claimed invention. Office action, at 3. However, Applicant respectfully submits that there is no suggestion to combine the references and even if the references are combined, a different result is produced.

Haverstock et al. is concerned with a system for enabling access to non-HTML documents from a web browser. Haverstock et al., abstract. In contrast, DuFresne is focused on providing a system where users can access HTML documents in a

dynamic environment. In DuFresne, "a processor is employed to process templates and to execute [html]tag extensions therein, and produces pages in pure HTML form for displaying by any Web browser." DuFresne, abstract.

Applicant respectfully submits that the Manual of Patent Examining Procedure explicitly states that if "the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. M.P.E.P. §2143.01, M-1338 (Feb.2000) (citing In re Ratti, 270 F.2d 810,123 USPQ 349 (CCPA 1959)).

Dufresne provides a method and system for providing HTML information exchange between the user and the server for HTML documents. The initial request that a user makes in Dufresne is for an HTML document. These documents have been processed so that each has a corresponding template and such that the data is stored in a database retrieveable upon execution of tags in the template. Dufresne does not provide for processing a query which could lead to non-HTML documents, such as a non-HTML website, nor for a situation where a client requests a non-HTML document.

Therefore one of skill in the art would not be motivated to combine the DuFresne patent with the Haverstock et al. patent.

4. The 35 U.S.C. § 103 Rejection of Claims 1-12 over DuFresne in view of Haverstock et al.

Assuming arguendo, that there is a suggestion to combine the references, Applicants contend that the invention is not obvious over the prior art.

a. Claim 1

In rejecting claim 1, the Examiner cites to various passages in DuFresne as providing support for the rejection.

Office action, at 2 and 3.

However, Applicant respectfully submits that DuFresne does not teach or suggestall of the elements of the invention recited in Applicant's claim 1. First, DuFresne fails to disclose use of a search engine as recited in Applicant's claim 1. DuFresne discloses a client making a request for a particular web page by entering a URL to a protected document. DuFresne, Col. 18, lines 61-63.

In contrast, in Applicant's claimed invention a search is conducted with the use of a search engine. Specifically, Applicant's claim 1 recites "a search engine having access to all documents on the web servers."

Additionally, in DuFresne, "[w]hen a client makes a request for a particular Web page controlled by the Web server 20, the server processes the request ... and returns the page to the client for display." DuFresne, Col. 6, lines 29-33. In DuFresne only one document is retrieved, as is stated in various passages throughout the cited reference. DuFresne Col. 9, lines 26-27; Col. 6, lines 29-33. Therefore there is not a plurality of results that are screened. In contrast, Applicant's claim 1 recites, "screening the search results...."

A plurality of results are not produced in DuFresne as only a single URL is entered corresponding to a single document. In contrast Applicant's claim recites "screening the search results with the access control list with the access control list to determine the documents for which a user performing a search has access."

Next, DuFresne does provide for use of an access control list but in association with a single template, not a plurality of documents as recited in Applicant's claim.

DuFresne, Col. 10, lines 9-10. DuFresne provides that two access control fields are items in the template that is retrieved upon a user's request. DuFresne, Col. 9, lines 55-57.

In contrast, Applicant's claimed invention provides, "the documents associated with an access control list...." In the

Applicant's claimed invention a plurality of documents are associated with a single access control list, but the user never knows about documents to which he does not have access. In DuFresne, a single fetched template includes two access control list fields which will grant or deny access and so a user knows of his access level (which may not be desirable).

Therefore, for at least these reasons DuFresne fails to teach or suggest elements of claim 1.

The Examiner has stated that DuFresne discloses the claimed invention except that DuFresne fails to teach or suggest "the documents each having a security level, with each document." Office action, at 3. The Examiner provides that Haverstock et al. supplements the missing teaching.

Haverstock et al. fail to supplement the missing teachings of DuFresne outlined above. Haverstock et al. provide that a user enters a URL therefore, (Haverstock et al., Col. 2, lines 59-60) only one document is retrieved from that user. Additionally, at Col. 6, lines 51-54, Haverstock et al. provide that a document may contain certain fields that are access controlled and that authorization allows one to do certain things through access control lists. Therefore more than one access control list is used per document. Additionally, Haverstock et al. fails to teach or suggest where the access control lists are stored.

Therefore, for at least these reasons, Haverstock et al. fail to supplement the missing teachings of DuFresne.

Accordingly, a prima facie case of obviousness has not been established.

b. Claim 2

In addition to the arguments set forth immediately above, claim 2 includes additional features not present in the remaining claims suitable to patent protection.

The Examiner states that passages within the cited DuFresne reference provide the element recited in claim 2 of "means for forwarding to the user only those document titles

compatible with the authorized access of the user, wherein titles that are not compatible with the authorized access of the user are not forwarded to the user..." Office action, at 3.

Applicant respectfully submits that DuFresne fails to teach or suggest this element of Applicant's claimed invention. As stated above, a single URL is entered by the user so that the user may retrieve the single document pertaining to that URL. DuFresne, Col. 4, lines 30-32; Col. 18, lines 61-63.

In contrast, in Applicant's claimed invention, as recited in claim 2, all of the document titles which the user has access to, are forwarded to the user. This differs from DuFresne in two ways. First, in Applicant's claim, if the user is authorized to have access to multiple document titles then multiple document titles are forwarded to the user. In contrast, in all cases in DuFresne only a single document is forwarded to the user as only a single document was requested and only a single document was retrieved.

Secondly, Applicant's claimed invention recites retrieving document titles. In contrast, DuFresne recites retrieving a document.

The Examiner further provides that Haverstock et al. discloses another element of Applicant's claim 2 that DuFresne fails to teach or suggest. Specifically, "thereby preventing the user from discovering the existence of said document titles through the use of the search engine."

Applicant respectfully submits that both DuFresne and Haverstock et al. fail to disclose this element. In both DuFresne and Haverstock, a user enters a URL to retrieve a single document. DuFresne, Col. 4, lines 30-32; Col. 18, lines 61-63; Haverstock et al. Col. 3, lines 42-43. If the user does not have access to the document, the user will not be able to retrieve the document. However, the user is already aware of the existence of the document, as the user has entered in a URL corresponding to that document.

In contrast, as Applicant's invention involves the use of a search engine, multiple document titles having the search

criteria may be retrieved. However, only those document titles that the user has access to are forwarded to the user. Therefore, the user is prevented from discovering the existence of the document titles which he does not have access to.

The Examiner cites to passages in Haverstock et al. which provide that access to certain fields of a document, or certain functions such as reading and writing of a document can be restricted to certain users. Office action, at 3. However, in these cases the user is still aware of the existence of the document as the user is viewing the document. The user would also be aware of the fact that he could only read on a document yet not write to it. Or, if as in Haverstock et al. the user were to enter a URL and a default function results in an attempt to hide the document, a user may logically inquire as to the status of the Web page he was attempting to retrieve. The user is still aware of the Web page existence.

Applicant respectfully points out that the Examiner must refrain from using the teachings of the specification in determining obviousness. The Federal Circuit articulated this well established rule as follows:

Care must be taken to avoid hindsight reconstruction by using 'the patent in suit as a guide through the maze of prior art references, combining the right reference in the right way so as to achieve the results of the claims in suit.' Grain Processing Corp. v. American Maize Products Corp., 840 F.2d 902,907 (Fed. Cir. 1988)

Therefore, for at least the reasons stated above Haverstock et al. fails to supplement the missing teaching of DuFresne.

Accordingly, a prima facie case of obviousness has not been established.

c. Claim 4

Claim 4 includes additional features not present in the remaining claims suitable to patent protection.

In rejecting claim 4, (Office action, at 4) the Examiner states that DuFresne discloses the following element of claim 4: "executing a query on a query server having access to a document index of documents available for searching on document servers provided in the web site by a person having a unique identification code without regard to access control limitations, yielding a list of all relevant documents, each document having a unique URL...."

DuFresne fails to teach or suggest the recited elements of "executing a query...yielding a list of all relevant documents having a unique URL..." In DuFresne, a query is not executed, rather a URL address is inputted. Additionally a list of all relevant documents having a unique URL is not provided for in DuFresne. In DuFresne a user only enters a single URL therefore, only the template corresponding to that URL is retrieved, as is stated in various passages throughout the cited reference. DuFresne Col. 9, lines 26-27; Col. 6, lines 29-33. DuFresne discloses a client making a request for a particular web page by entering a URL to a protected document. DuFresne, Col. 18, lines 61-63.

In the present invention a user's query yields a list of all relevant documents corresponding to that query, each document having a unique URL. In contrast, in DuFresne a URL yields the template specifically identified by that URL.

The next element of claim 4 recites, "reviewing all URLs by the document servers after the search is executed using an access control list associated with each document server to check whether each URL is compatible with the access level of the identification code of the person executing the query..."

As stated above with regard to claim 1, in DuFresne a user enters only one URL therefore "all URLs" cannot be reviewed as there is only one URL.

Additionally, each template in DuFresne contains, or is

associated with, its own access control lists. DuFresne, Col. 10, lines 9-10. In the claimed invention each document server is associated with a single access control list as recited in the claimed invention. An access control list is not contained in each document as in the prior art. Furthermore, multiple templates in DuFresne have multiple access control lists. In contrast, in the present invention each document server having multiple documents is associated with a single access control list. As provided in the Applicant's specification, "instead of multiple control lists, a user enters, either manually or automatically, his or her identification, together with the query to be searched." Applicant's specification, at page 2, lines 35-38. As stated above with regard to claim 1, this element is not supplemented by Haverstock et al.

The next element of claim 4 recites, "delivering only those URLs that are compatible with the access level of the person, wherein each URL that is not compatible with the access level of the person is withheld...." Again, in DuFresne only a single URL is entered therefore, only a single document could be delivered.

The final element in claim 4 of "preventing the person from discovering the URLs that are not compatible with the access level of the person" is the same as claim 2. Therefore, for the reasons described above for claim 2 with regards to DuFresne and Haverstock et al. Applicant submits that the cited references fail to teach or suggest this element of claim 4.

For the reasons presented above, Applicant submits that a prima face case of obviousness has not been established with respect to claim 4.

d. Claim 7

In addition to the argument set forth immediately

 $^{^{5}\}mathrm{This}$ resembles the prior art military system where each document is labeled with a security access label.

above, claim 7 include additional features not present in the other claims suitable to patent protection.

Claim 7 recites, "[t]he method of claim 5 further defined by storing the access control list separately from the documents."

In contrast, DuFresne recites that, "[a] template includes HTML tags and tag extensions to define and build a Web page." DuFresne, Col. 8, lines 66-67. Also, "[e]ach item in a template, such as the ID field 91 and access control fields 92 and 93 is stored as a field name/value pair in a database. A 'field' is the name of an item in a template and the 'value' is the corresponding data record held by that field." DuFresne, Col. 9, lines 55-59. Furthermore, the tag when processed, is replaced by the contents of a database field. DuFresne, Col. 3, lines 14-17 and Col. 12, lines 9-11. Therefore, the access control list field of the template when processed is replaced with the data from the access control list database. Accordingly, the access control list is stored or associated with the template document. In contrast, the access control list of the present invention as recited in claim 7 is stored separately from the document. Therefore, DuFresne fails to teach or suggest this element of Applicant's claimed invention.

Additionally, Haverstock et al. fail to supplement the missing teaching. Haverstock et al. provide for the use of access control lists but do not provide where the lists are stored. Haverstock et al., Col. 6, line3 64-65 and Col. 7, lines 1-20. Therefore, Haverstock et al. fail to supplement the missing teaching.

Applicant respectfully submits that, "[t]he consistent criterion for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that this process should be carried out and would have a reasonable likelihood of success, viewed in light of the prior art.... Both the suggestion and the expectation of success must be founded in

the prior art, not in the applicant's disclosure." <u>In re Dow Chemical</u>, 5 U.S.P.Q. 2d 1529, 1531 (Fed. Cir. 1988) (citations omitted). As this has not occurred, Applicant submits that a prima facie case of obviousness has not been established with respect to claim 7.

e. Claim 8

In addition to the argument set forth immediately above, claim 8 includes additional features not present in the remaining claims.

Claim 8 recites, "[t]he method of claim 4 further defined by implementing access control with partial URLs indicating the hierarchy of documents to which a person with a unique identification has access."

DuFresne provides that a user can be given different URLs and that each URL provides a resulting page that is different from the other URLs. URLs may specify the same beginning code, however, one URL may be further defined. DuFresne, Col. 11, lines 3-25. The more defined URL could provide a document that does not have as much information as a less defined URL. DuFresne, Col. 11, lines, 3-25. However, DuFresne does not teach or suggest, using the hierarchy of URLs in conjunction with access control and user identification.

Haverstock et al. provide that different users can be given access to different fields of a page or to different functionality levels. Haverstock et al., Col. 7, lines 8-37. However, Haverstock et al. does not teach or suggest specifically how this is accomplished.

Therefore, Applicant submits that a prima facie case of obviousness has not been established with respect to claim 8.

f. Claims 11-12

Claims 11 and 12 include additional features not present in the remaining claims suitable to patent protection.

Claim 11 recites, "[t]he method of claim 5 wherein a

single access control list is provided for all document servers."

Claim 12 recites, "[t]he method of claim 5 wherein an

access control list is provided for each document server."

In contrast both DuFresne and Haverstock et al. provide for the user of more than one access control list. Specifically, DuFresne provides "[p]referably, each template is protected by the access control lists (ACL's) 92, 93 to limit access to specified group of authorized users." DuFresne, Col. 10, lines 9-11. Therefore one document template has more than one access control list. In Applicant's claimed invention, a single access control list is provided for one server or for all document servers, not more than one list per document or even more than one list per document server.

Also, as stated above with regard to claims 1, 4 and 7, in DuFresne each template corresponding to a single document contains its own access control list. In contrast, in the present invention each document server having multiple documents is provided with a single access control list.

Additionally, Haverstock et al. fails to supplement the missing teaching as it provides, "[a]uthorization: Allowing you to so certain things through Access Control Lists ("ACL")...."

Haverstock et al., Col.6, lines 64-65. Haverstock et al. provide for use of multiple access control lists. Additionally, it does not provide specifically how the lists are allocated.

Therefore, both references fail to teach or suggest use of only one access control list per document server or servers as recited in claims 11 and 12.

Accordingly, Applicant submits that a prima facie case of obviousness has not been established with respect to claims 11 and 12.

5. The 35 U.S.C. § 103 Rejection of Claims 13-19 over DuFresne

A. Claim 13

The Examiner has rejected claim 13 as being obvious

over DuFresne. Applicant submits that DuFresne fails to render claim 13 obvious for at least the following reasons.

Claim 13 recites, "each document server having an access control list...."

As stated above, with regard to claims 1, 4, 7, 11 and 12, in DuFresne each template corresponding to a single document contains its own access control lists. With the present invention, each document server (having multiple documents) has one access control list. Therefore, for at least this reason as described here and in the argument with regard to claims 1, 4, 7, 11 and 12, Applicant submits that DuFresne fails to teach or suggest this element of Applicant's claimed invention.

Claim 13 also recites, "defining user identification and for each user identification listing URLs for which access is permitted or denied..." DuFresne fails to teach or suggest the specific method by which it is determined whether users are permitted or denied access. DuFresne provides, "the server 403 retrieves the template to the requested document and further determines whether the user is specified in the access control list. If the user is properly authorized, the server grants access to the record and begins processing the template to prepare an output display page 415." DuFresne, Col. 19, lines 41-47. However, DuFresne does not further describe how this takes place, therefore, fails to teach or suggest the element of Applicant's claimed invention reciting for each user identification listing URLs for which access is permitted or denied.

The next element of claim 13 recites, "executing a query on a query server having access to a document index of documents available for searching on the document servers by a person having one of said identification code." For at least the reasons provided above with regard to claim 4 Applicant submits this element is not taught or suggested by DuFresne.

Claim 13 also recites, "determining by one of the document servers whether each URL is compatible with the access

level of the identification code of the person; and producing only those documents whose URL is compatible with the access level of the identification code of the person, wherein each non-compatible URL is withheld."

As stated with regard to claims 1, 2 and 4 only a single document is requested and produced in DuFresne et al.

Accordingly, there is no need to determine if each URL is compatible with the access level of the person as only one URL is used and only one document corresponding to the URL is provided. Applicant's claim 13 recites "producing only those documents whose URL is compatible with the access level of the identification code of the person, wherein each non-compatible URL is withheld." Applicant's claimed invention produces "documents" not a single document as recited in the prior art. Non compatible documents are withheld in the claimed invention.

Applicant respectfully submits that, "[t]he test for obviousness, is whether the invention considered as a whole would have been obvious or nonobvious. Failure to consider the claimed invention as a whole is an error of the law." <u>Jones v. Hardy</u>, 727 F.2d 1524, 1529 (Fed. Cir. 1984).

Therefore, Applicant submits that a prima face case of obviousness has not been established with respect to claim 13.

B. Claims 15 and 16

Claims 15 and 16 include additional features not present in the claims described above suitable to patent protection.

Claim 15 recites, "[t]he method of claim 13 wherein each access control list lists URLs for each user identification number with a hierarchical indication of documents for which access is permitted or denied."

Claim 16 recites, "[t]he method of claim 15 wherein said hierarchical indication of documents is made by partial URLs."

Applicant submits that DuFresne fails to teach or

suggest these elements for at least the reasons stated as above with regard to claim 8. DuFresne teaches use of full and basic URLs. DuFresne, Col. 11, lines 7-12. However, DuFresne fails to teach use of these URLs in conjunction with an access control list. As stated in claim 15 to determine whether access to a document is permitted or denied "each access control list lists URLs for each user identification number with a hierarchical indication of documents...." This is not taught or suggested in DuFresne.

Claim 16 depends on claim 15 and is therefore, distinguished from the prior art for at least the same reasons as claim 15.

Therefore, Applicant submits that a prima facie case of obviousness has not been established with respect to claims 15 and 16.

Relief Sought

Appellant believes that the pending claims rejected by the Examiner were non-obvious to a person of ordinary skill in the art because there is no suggestion to combine the teachings of DuFresne with those of Haverstock et al., and also because assuming arguendo neither of the references teach or suggest all of the elements of Applicant's claimed invention. Applicant's invention operates with a search engine, with access to all documents on associated servers, finding documents and then transparently providing only those documents for which the user has access. The prior art simply does not operate in the search engine context. Based on the Applicant's arguments as set forth above, the claims are believed to be patentable and Applicant respectfully requests that the Examiner's rejections be reversed.

APPENDIX

Claims

1. (three times amended) A document retrieval system with access control for a search engine capable of searching documents distributed over web servers in an electronic network comprising,

one or more web servers having electronic versions of documents said documents each having a security level, with each document available by request,

a search engine having access to all documents on the web servers, the documents associated with an access control list linking the security level of users with the security level of documents on the web servers, with the web servers screening the search results with the access control list to determine the documents for which a user performing a search has access.

- 2. (twice amended) The system of claim 1 further defined by means for forwarding to the user only those document titles compatible with the authorized access of the user, wherein document titles that are not compatible with the authorized access of the user are not forwarded to the user thereby preventing the user from discovering the existence of said document titles through the use of the search engine.
- 3. The system of claim 1 further comprising a communications link between a query server, connected to the search engine, and access control lists associated with the web servers.

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4. (three times amended) A method of document retrieval in a network environment having web sites where documents are stored with a plurality of access levels and query servers where document searches are launched comprising,

executing a query on a query server having access to a document index of documents available for searching on document servers provided in the web site by a person having a unique identification code without regard to access control limitations, yielding a list of all relevant documents, each document having a unique URL,

reviewing all URLs by the document servers after the search is executed using an access control list associated with each document server to check whether each URL is compatible with the access level of the identification code of the person executing the query,

delivering only those URLs that are compatible with the access level of the person, wherein each URL that is not compatible with the access level of the person is withheld, and

preventing the person from discovering the URLs that are not compatible with the access level of the person.

5. The method of claim 4 further defined by providing a data link between the query server and access control lists for associated web servers.

. . .)

- 6. The method of claim 5 further defined by storing the access control list separately from the index of documents.
- 7. The method of claim 5 further defined by storing the access control list separately from the documents.
- 8. The method of claim 4 further defined by implementing access control with partial URLs indicating the hierarchy of documents to which a person with a unique identification code has access.
- 9. The method of claim 4 further defined by implementing access control with a common gateway interface script.
- 10. The method of claim 9 wherein said common gateway interface script returns a message to the query server indicating URLs to which a person with a unique identification code has access.
- 11. The method of claim 5 wherein a single access control list is provided for all document servers.

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- 12. The method of claim 5 wherein an access control list is provided for each document server.
- 13. (twice amended) A method of document retrieval in a network environment having web sites where documents are stored and query servers where document searches are launched comprising,

providing a plurality of document servers in the web sites, each having an association with a plurality of documents, each document identified with a unique URL, each document server having an access control list defining user identification and for each user identification listing URLs for which access is permitted or denied,

executing a query on a query server having access to a document index of documents available for searching on the document servers by a person having one of said identification codes,

determining by one of the document servers whether each URL is compatible with the access level of the identification code of the person; and

producing only those documents whose URL is compatible with the access level of the identification code of the person, wherein each non-compatible URL is withheld.

14. The method of claim 13 wherein the URLs are expressed in HTTP protocol.

. . . .

- 15. The method of claim 13 wherein each access control list lists URLs for each user identification number with a hierarchical indication of documents for which access is permitted or denied.
- 16. The method of claim 15 wherein said hierarchical indication of documents is by partial URLs.
- 17. The method of claim 13 further defined by accessing the access control list by the filesystem of the query server.
- 18. The method of claim 13 further defined by accessing the access control list by a file transfer protocol.
- 19. The method of claim 13 further defined by confirming access to the access control list by a script message from a document server.

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CERTIFICATE OF MAILING

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, p.C. 20231.

Signed: <u>Prenda</u> Elmidolan

Date: May 2, 2002

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